

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 36-66 will be pending in the application, with claim 36, 46, and 56 being the independent claims. New claim 66 is sought to be added, thus one additional claim is requested, and a fee of \$25, based on small entity status is petitioned to be paid from the undersigned's deposit account 22-0261, Venable LLP. Additional claims fees are included in associated papers, however, should additional fees be due, they are hereby petitioned to be paid by deposit account 22-0261, and notice to the undersigned is respectfully requested. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above Amendment and the following Remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 102

In the Action on pages 2-3, section 3, claims 36-39, 43, 46-49, 56-59, and 63 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,044,373 to Gladney et al (hereinafter "Gladney"). Applicants respectfully traverse the rejection.

Applicant's claimed invention sets forth a trap layer that intercepts an attempted file operation access based on the type of operation access being attempted. Enforcement of the operation access privilege allows enabled operations or denies restricted operations. The trap layer's operation does not depend on validating a user or the user's access privileges but rather on the operation access privilege settings only.

Behavior of the trap layer according to the present invention is independent of the calling application. Operation of the trap layer is also invisible to the calling applications. Users may continue to attempt to access the files in the normal fashion using all known and published file access methods, including system calls or application program interface (API) functions. The trap layer simply intercepts all file access requests to determine whether the access operation is allowed or not.

Traditional file system access control lists (ACLs) continue to function unaffected by the trap layer of the present invention. The behavior of the trap layer is such that the request is rejected prior to reaching the file system and the associated security validation that is

available in all POSIX-compliant file systems.

The trap layer according to the present invention works with any and all file systems and is completely independent of a file system.

As amended, claim 36 recites a method of applying an *operation access privilege* to at least a logical portion of a logical storage medium in communication with a computer, the method comprising the steps of: (a) *providing an operation access privilege* indicative of at least one of an enabled operation and/or a restricted operation to be performed on at least one logical portion of a logical storage medium; (b) *associating said operation access privilege with at least one logical portion of said logical storage medium*; (c) intercepting in a trap layer an attempted operation on said at least one logical portion identified by at least one data identifier; and (d) at least one of *allowing said attempted operation if matching said enabled operation*, and/or *denying said attempted operation if matching said restricted operation*. (Emphasis added). Gladney fails to teach at least three elements of claim 36.

First, Gladney fails to teach providing an operation access privilege indicative of at least one of an enabled operation or a restricted operation to be performed on at least one logical portion of a logical storage medium. Instead, the access control disclosed in Gladney is a user-based or client-based access control system. Access to a controlled element is granted or denied based on whether the client has permission to access the protected element. See, e.g., Gladney, Abstract, FIG. 4 (S120). In contrast, the method of claim 36 provides an operation access privilege that enables or restricts operations on a logical portion of a logical storage medium independently of who or what has initiated the operation. See, e.g., specification p.12, lines 4-30. Therefore, Gladney does not teach “providing an operation access privilege indicative of at least one of an enabled operation or a restricted operation to be performed on at least one logical portion of a logical storage medium.”

Second, Gladney does not teach “associating said operation access privilege with at least one logical portion of said logical storage medium.” Instead, as discussed above, Gladney associates client-based access privileges with protected elements, where the protecting resource manager decides whether a client is to be given access to a protected element. See, e.g., Gladney, FIGS. 4-6. In contrast, the method in claim 36 associates access privileges based on operations with logical portions of a logical storage medium.

Therefore, Gladney does not teach association of an operation access privilege with at least

one logical portion of said logical storage medium.

Third, Gladney does not teach “at least one of allowing said attempted operation if matching said enabled operation, or denying said attempted operation if matching said restricted operation.” Instead, the access or denial of access in Gladney is based on the identity of the client. Gladney does not restrict access to a protected element if the operation is restricted, regardless of who the client is. Therefore, Gladney does not teach “at least one of allowing said attempted operation if matching said enabled operation, or denying said attempted operation if matching said restricted operation.”

Because Gladney fails to teach at least three elements of claim 36, Applicants respectfully request that the rejection be withdrawn and the claim be allowed.

Claims 37-39 depend from claim 36 and are allowable as being dependent from an allowable claim.

Claim 46 recites elements similar to claim 36 and is allowable for at least the same reasons as claim 36.

Claims 47-49 depend from claim 46 and are allowable as being dependent from an allowable claim.

Claim 56 recites elements similar to claim 36 and is allowable for at least the same reasons as claim 36.

Claims 57-59, and 63 depend from claim 56 and are allowable as being dependent from an allowable claim.

Rejections under 35 U.S.C. § 103

In the Action on pages 3-6, section 5, claims 40-42, 44-45, 50-52, 54-55, 60-62, and 64-65 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gladney in light of the features of which Official Notice is taken (hereinafter “the Official Notice features”). Applicants respectfully traverse the rejection.

Claims 40-42, 44-45, 50-52, 54-55, 60-62, and 64-65 depend from allowable claims, as discussed above, and are therefore allowable.

The Examiner concedes at Paragraph 5(a)(ii) that Gladney fails to teach or suggest all of the elements of the claimed invention. Applicants agree. As discussed above, Gladney fails to teach (1) providing operation access privileges, (2) associating operation access

privileges with logical portions of a logical storage medium, and (3) allowing enabled operations and/or denying an attempted operation if the operation is restricted. Applicants respectfully note that the applied references fail to at least teach the elements of these claims noted above with reference to claim 36.

The Official Notice features recited by the Action, alone or in combination, fail to correct the deficiencies of Gladney. None of the Official Notice features discussed in the Action include an operation access privilege. The Official Notice features at most may include different examples of file operations, but do not include the method recited in the independent claims of the present invention, and do not teach or suggest the use of operation access privileges as claimed. The combination of the Official Notice features along with Gladney does not yield, teach, or suggest, a system or method according to the claimed invention that intercepts attempted operation access via a trap layer, using file operation access privileges to enable access to allowed files or deny access to restricted operations on files or other logical portions of a logical storage medium based on an attempted operation. Therefore, claims 40-42, 44-45, 50-52, 54-55, 60-62, and 64-65 are allowable, and Applicants respectfully request that the rejection be withdrawn.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

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Respectfully submitted,



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